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ON THE TRAINING OF NURSES FOR THE SICK.[1]

BY JOHN H. PACKARD, M. D., OF PHILADELPHIA.

Mr. President, — By the courteous invitation of your committee of arrangements I have the honor of offering to your association some thoughts on the subject of the training of nurses for the sick, a subject which has only within a very few years begun to attract in this country any attention at all, and which is deserving of far more general and practical recognition than it has as yet secured. A new departure has now been taken, and it is greatly to be hoped that the efforts made to establish and maintain schools for nurses will meet with the approbation of the medical profession and the generous support of the public.

Perhaps you will excuse me if I here dwell briefly upon the fact that in America the earliest movement in this direction was made in this city. The Philadelphia Nurse Society was in existence previous to the year 1852, but for how long a time or how actively I have been unable to ascertain. In that year it was united with the Philadelphia Lying-in Charity, then under the management of Dr. Joseph Warrington, and has been carried on with great success to the present day. This institution, however, has had for its main object the training of nurses for obstetrical cases. In 1872 the managers of the Woman's Hospital, who had for eleven years been carrying on a system of instruction of nurses for the sick, enlarged and improved that system by establishing regular courses of lectures, and their school received the first of several endowments, which have placed it on a permanent basis. We may, therefore, with pardonable pride claim for Philadelphia the credit of having, among American cities, taken the initiative in the matter of nurse-training.

At present there are, so far as I have been able to ascertain, only five schools of this kind in the United States. Besides the one just mentioned in this city there are two in New York, one in Boston, and one in New Haven. I have reason to believe that another is projected in connection with the Johns Hopkins Hospital in Baltimore.

This statement includes only the regular schools in which the nurses are trained as for any other business or occupation. There are institutions of a religious character, such as the Bishop Potter Memorial House, connected with the Episcopal Hospital in Philadelphia, intended to develop attendants whose duties are more those of deaconesses or female lay-readers than of nurses, but they do not come within our present field of view.

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[1] Read before the American Social Science Association, at its meeting in Philadelphia, in May, 1876.

Now when the population and social conditions of the large cities in the United States are considered, it will be evident, on the one hand, that the demand for nurses must be far greater than these five schools can supply, and on the other hand that the material out of which the best class of nurses can be made must be abundantly forthcoming. Hence it is highly desirable to inquire how the schools can be put upon the best basis, how they can be developed and increased in number, and how they may be conducted so as to evolve the highest and most useful results. The demand for trained nurses, just spoken of, is one which must not be supposed to be already active. There is certainly a need of them, and as soon as the public mind is conscious of this, and aware that the need can be supplied, the demand will arise. Once established, it will become more and more steady and positive.

The schools at present existing are under the control of volunteer associations, and are all attached either wholly or partly to large general hospitals. This feature — the hospital connection — is one of prime importance. Without it the training loses very much of its practical character; the great advantage of observation of collected cases and of competition with other pupils, the subjection to regular discipline, and the service under different physicians and surgeons are clearly unattainable elsewhere.

Since, on the other hand, the hospitals gain the service of nurses of good character and definite qualifications, who have higher incentives to activity, zeal, and faithfulness than the mere earning of wages, it is very much to be hoped that ultimately every large general hospital — perhaps we might better say every hospital — may become a regular school for nurses. Such an arrangement would give the hospitals a new claim upon the generosity of the public, since they would, in furnishing a continual source of supply of trained attendants for the sick, make a direct and by no means insignificant return for the support afforded them.

So far as I am aware, the only hospital in this country which has its own training-school for nurses, under the control of its own board of managers, is the Woman's Hospital of Philadelphia; and the managers, aware of the necessity for a wider field of instruction than is afforded by a special institution, have within a few months made arrangements for the admission of their pupils to the wards of the large hospital connected with the Blockley Almshouse. All the other schools are carried on by organizations of a more or less independent character, acquiring hospital advantages only by special agreement with the authorities of those institutions.

Both the New York schools are under the supervision of a committee of seven ladies, — a standing committee of an association called the Local Visiting Committee for Bellevue and other Public Hospitals of the City of New York. This association is composed of volunteers working under the control and by the direction of the State Charities Aid Association, of which it forms a part. It is in concert, in its operations, with the State Board of Commissioners of Charities and Correction.

The Boston school is under the control of a board of directors originally appointed by the Woman's Education Society.

The New Haven school is managed by a committee of ladies, but I am not informed from whom they derive their authority.

The question will probably arise, as this important matter of nurse-training becomes further developed, whether it is or is not desirable that the government of the hospital and that of the nurse-school should be vested in one and the same body. • It would perhaps be premature to discuss the point now, but I may say that there are great advantages attending the plan of having the nurses admitted, as at present, as pupils under an organization separate from that of the hospital management. The duty of selecting suitable women, of attending to many details of their life as pupils, and of arranging for their suitable employment after they are duly qualified, can be much better fulfilled by a special committee or board than by those already charged with the administration of the affairs of a hospital. Such an arrangement does not necessarily involve so much risk of collisions or conflicts of authority as might, *a priori*, be supposed. A great deal of tact and judgment might be demanded on the part of all concerned, including the medical staff, in getting a double arrangement of this kind into smooth working order, but the ultimate result would probably be worth all it cost.

Another question arises, whether it would be better to have a general association in each large city, as for instance in Philadelphia, where there are twelve hospitals, to take charge of the organizing of schools and to constitute a central bureau of administration. Desirable as such an arrangement might seem in the abstract, it would probably fail to work well, at least in the existing state of things. Such a bureau, unless managed with wonderful discretion, would be very unapt to harmonize with a number of separate and altogether independent boards, such as those controlling the various hospitals.

The probability is that schools of this kind will be developed in most cases by ladies interested in the visiting of hospitals, or sometimes by the action of the board of managers, inviting the coöperation of such persons as are known to them to have the requisite judgment and experience.

The regulations of the existing schools do not vary in any very material points, the greatest difference being in the term of instruction. This is, in Boston and New York, two years; in New Haven, fifteen months; in Philadelphia, one year. I cannot but urge that in a matter like this the expenditure of two years is surely not too much. It must be remembered that the training of these nurses is a matter which involves the comfort and perhaps the lives of those of whom they are to take charge. We should hardly expect to get an ordinary house-servant, a waiter, or a chamber-maid, certainly not a cook, into thorough training in one year. A nurse who had had twelve months of judicious instruction would undoubtedly be better than one who had only natural qualifications; but I cannot think that the average of pupils could, after so short a time, claim a certificate of proficiency.

Applicants for instruction must be, in New York, between the ages of twenty and thirty-five; in New Haven, between twenty and forty; in Philadelphia, between twenty-one and forty-five; and in Boston, between twenty-five and thirty-five. Without laying much stress upon this, it may be suggested that maturity of physical constitution and the stability of purpose which belongs more to twenty-five than to twenty would make the former in most cases the preferable limit; while by declining to afford instruction to those over thirty-five years of age we may exclude many women who would be capable of long and valuable service. On these points, as well as in regard to the other physical and mental qualifications of applicants, there is room for much discretion on the part of those to whom the matter of admissions is entrusted.

In the New Haven school it is especially stated that the rough work of the wards is to be done by convalescents or other persons appointed by the steward. This seems to me to be objectionable. There cannot be any thorough instruction which does not include every detail of the care of the sick-room. When hospital wards need scrubbing, the patients should be removed from them, and they should be cleaned just as any other rooms would be; but all the work of attendance upon the sick should be made a matter of practical experience with the pupils.

Let us now consider what instruction is required. The comfort of the sick, and often their recovery, may be truly said to be the result of a mass of details. A thorough practical understanding of these details is indispensable for a good nurse.

Among them may be mentioned the management of the lighting, ventilation, temperature, cleaning, and tidying of the room; the changing of bed-clothes and body-clothes; the handling of the patient; the avoidance of noises; the administration of medicines; the proper reception and removal of discharges; disinfection, and the preparation and administration of food. Besides all this there are in many cases, and particularly in surgical cases, special matters to be attended to, such as the preparation of dressings and other appliances for use at the time of the surgeon's visit. Another most important function of the nurse is to watch the patient, and to give the physician a clear and faithful report of what takes place between his visits.

Now all these are matters which can be taught only by steady, constant, patient drilling, and that almost wholly at the bedside. What we want in a nurse is an attendant for the sick, one who has a practical familiarity with what is to be done and the best way of doing it. In the vast majority of cases it would be idle to begin the training of a nurse by giving her lectures on anything. This form of instruction is one which can be of benefit only to those who have had a certain amount of experience in receiving it. At a later stage, when the bedside duties have become familiar, it may be very well that the principles on which they are conducted should be clearly and simply laid down. But I submit that a nurse may be taught to keep the air of a room pure without having ever heard of ozone or knowing anything about the germ theory. To begin the training of a practical attendant upon the sick by lectures on chemistry, or even to introduce these at any stage of her instruction, seems to me to be a mistake. We do not want a scientific person; we do not want a person with theories of her own, or with a smattering of other people's theories. There is one of our nurse-schools in which the pupils are given lectures on the eye and on the ophthalmoscope, on poisons and their antidotes, on the examination of the urine and the taking of accounts of cases, and on pyæmia. Bandaging and the treatment of fractures have also been taught, and in the English schools anatomy and physiology are made parts of the course.

Now I am well aware that these remarks will offend some, who would argue that no knowledge is useless, and who would like to see the nurse occupy the most exalted position she could attain. But I think that my views will stand the test of common sense.

In the first place, we add to the expense of developing the nurse without really improving her. Of what use is it for her, more than for any one else, to hear lectures on the eye and the ophthalmoscope, subjects which occupy the earnest and constant study of highly educated men, and can be pursued to advantage by those only who give their whole time and attention to them? The knowledge of poisons and their antidotes, to be of any avail whatever in emergencies, must be clear and complete, and involves a degree of acuteness in diagnosis and an extent of acquaintance with medical practice which are beyond the possibilities of nurse-training.

Pyæmia is one of the obscurest subjects in pathology; it recently occupied the attention of one of the leading medical societies in London for several meetings, and the only result of the debate was to show how ignorant the distinguished gentlemen who took part felt and confessed themselves to be in regard to the matter.

As to the taking of accounts of cases, I have only to call attention to the rarity with which this is well done even by regularly educated physicians. Few residents in hospitals have the ability to do it; and there are many experienced practitioners, men of great skill and attainments in other respects, who have never acquired this faculty.

One consideration seems to me to dispose of the idea of teaching nurses to treat fractures. This is that the great majority of suits for malpractice brought against physicians are in cases of this kind. Should it appear in evidence that the details of treatment of a case in which the result was unsatisfactory had been entrusted to a nurse, there is little doubt that a jury would allow damages, and as little doubt that their verdict would be just.

I have said that superfluous training made the development of the nurse more costly, and this is true, even though the lectures be given free. The time and labor bestowed cannot count as nothing merely because no money equivalent is demanded for them. Not only the time of the teacher in the preparation and delivery of the lectures and demonstrations, but the time of the pupil in hearing and digesting them, must be reckoned as expended; and if it does not go directly to make the nurse, as a nurse, more efficient, it is so much added to the outlay without adequate return.

I have dwelt more particularly upon this point because it is one in respect to which there are great liabilities to error on the part of those who most desire the success of nurse-training. There is a certain seductiveness about the idea of an elevated standard of teaching which is very apt to obscure the exact aim to be attained. Let me, *per contra*, say that so far as I have been able to procure testimony on the subject, the nurses who are supplied by our training-schools in this country have given great satisfaction to those who have availed themselves of their services. The statements made to me are very positive and ample, and it would seem that, as was remarked at the commencement of this paper, the public had only to be made aware that there was a supply of trained nurses available, to awaken an active demand for their services.

Experience has shown that the average cost per annum of each pupil is from two hundred to four hundred dollars. In this city, the former sum is given me as the estimate; and the length of time that the school has been in operation seems to warrant its being regarded as a fair standard. But circumstances might readily occur which would increase the cost in certain years and in particular institutions. For our present purpose it is sufficient to show that the luxury of trained nurses is far from being an expensive one to the community.

There are many matters of interest in connection with the subject of this paper which I have not touched upon, and it would have been a labor of love for me to have dwelt at greater length upon those discussed, had my time permitted. My endeavor has been to contribute an honest mite to the advancement of a cause which well deserves far abler pleading.

A CASE OF AORTIC ANEURISM TREATED BY ELECTROLYSIS; FAILURE.

BY JOHN HOMANS, M. D.

James M., fifty years old, entered the Carney Hospital July 31, 1876, with an enormous aneurism of the arch of the aorta. The tumor had pushed through the walls of the thorax in the upper left pectoral region, forming an external pulsating swelling as large as a man's fist. The heart was crowded downwards and backwards, and the lung was displaced and more or less compressed by that part of the aneurism within the chest. The patient had always been healthy, and had worked hard. Four years since, one end of a stone which weighed two tons fell upon his chest and crushed him against the side of a ditch in which he was digging. He was released in a few minutes, but was not able to work for a week, and complained of soreness in the left pectoral region for several weeks. During the last two and a half years he has suffered, at times, severe pain in both pectoral regions, running through to the back and down the left arm; lately he has had slight dyspnœa and œdema of the lower extremities. The aneurism began to enlarge externally thirteen months ago.

On August 2d five gilded needles, insulated to within a quarter of an inch of the point, were inserted into the sac of the aneurism; the needles were pushed inwards about an inch and a quarter beneath the skin, and when all were inserted they described a circle round the apex of the tumor. Dr. J. J. Putnam was so obliging as to superintend the battery (Stöhrer's). He connected the needles with the positive pole, and joined the negative pole to a large metallic disk which was covered with a compress wet with salt and water. This was applied to the epigastric region, and was moved about occasionally. The patient was a little excited, and had a flushed face, with a pulse of 124. The following is Dr. Putnam's account of the operation: —

"The battery used was the ordinary Stöhrer's, freshly filled with a solution of bichromate of potash in diluted sulphuric acid. The needles were kept throughout in connection with the positive pole. Sudden interruptions of the current were avoided, and the pad at the negative pole was moved from one part of the chest to another as the skin beneath it became irritated.

"The number of cells employed varied from eight to ten, which was all that the patient could bear without much pain, the aim being to keep the needle of a galvanometer intercalated in the circuit constantly at a deviation of about forty-two per cent.

"The needles were kept in the aneurism during forty minutes, but since, after a time, the skin around some of them became slightly discolored, either bluish or pale, and somewhat sunken over a circle about two millimetres in diameter, these were removed and fresh ones (of steel) were inserted at neighboring points, ten punctures being made in all. Bubbles of gas and a little dark blood followed the needles as they were withdrawn."

The patient was bright and courageous during the operation, but after the needles were removed he became rather pale, and the extremities were cold. A cup of warm tea revived him, however. He stated that the insertion of the needles was the most painful part of the operation. The next day the pain through the back and down the arm was reported to be less than before the electrolysis. The tumor looked somewhat blue. On August 14th the patient reported that the pain above mentioned was very slight. His feet were still œdematous, and he complained of occasional dizziness. There was no albumen in the urine. On August 15th electrolysis was repeated; the tumor was then somewhat larger than when the patient entered the hospital.

"The second operation did not differ materially from the first except that steel needles only, insulated as above mentioned, were used, and one or two of them were removed and were not replaced in the course of the operation. The depths at which the needles had been inserted, measured from their points of junction with the skin, were found to be respectively two, one and a half, one and one fourth, one and three fourths, and one and five eighths inches.

"The insulation used consisted of several layers of a thin solution of shellac in alcohol, which was applied while the needles were as warm as the hand could bear, and this coating was found on the whole to work well, although on the withdrawal of some of the three-cornered needles it was found to have chipped off at a few points along their edges."

The second operation was more painful than the first, the patient experiencing a burning sensation while the current was passing. On August 21st he left the hospital, convinced that his pain was less than when he entered. The tumor, however, was larger, and the impulse was about the same.

RECENT PROGRESS IN OTOLOGY.

BY J. ORNE GREEN, M. D.

Histological Changes in the Labyrinth in certain Infectious Diseases. — Moos[1] gives the result of his microscopic investigations on the histological changes which occur in the labyrinth during typhoid fever, scarlatina, and variola. His observations embrace the clinical history and dissection of the ears in six cases of typhoid and in one each of scarlatina and variola; they are of interest as contributions to our knowledge of the possible results of those diseases, and help to explain some of the permanent changes in the ear which have been observed, but they cannot, nor is it claimed that they can, be considered as explanatory of the very frequent disturbances of the ear met with in these and other fevers during life.

In typhoid fever previous observations by Griesinger, Schwartze, Hoffman, Virchow, Marcus, and Politzer have demonstrated a variety of pathological changes in the ear, all of them of an inflammatory character; they are thus enumerated by Moos: "catarrh of the fauces with closure of the Eustachian tube; free secretion in the cavum tympani (Griesinger), often in great quantity; injection of the tympanic mucous membrane; purulent catarrh of the tympanic cavity, with its consequences; perforation of the membrana tympani, dislocation and loss of the hammer and anvil, inflammation and inflammatory maceration of the cells of the mastoid process and of the facial nerve; propagation of the inflammation to the meninges (Schwartze, Hoffman); inflammation of the parotid gland, with rupture into the external ear (Virchow, Hoffman); hyperæmia of the inner ear, in the vestibule, cochlea, and the semicircular canals (Marcus, Politzer, and Schwartze); ecchymoses in the vestibule and lower part of the cochlea, but not in the semicircular canals, together with ecchymoses in the tympanic cavity and in the bony tube (Politzer); finally, Toynbee has observed and described cases of typhus in which the apparatus of the organ was completely annihilated, the nervous apparatus being wholly disorganized, the fluid in the cochlea and vestibule of dark color and tinged with blood." Cases of typhoid have also been described in which disturbances of hearing existed and yet dissection showed no appreciable lesion of the ear, and Schwartze has explained these by assuming anomalies in the nervous centres, such as hyperæmia and anæmia of the brain or its meninges, or by the peculiar action of the typhus blood on the brain.

In addition to these the observations of Moos now show that, at least in some cases, the minute structures of the labyrinth are diseased. As the result of his microscopical examinations he says, "We shall find that in ileo-typhus the entire labyrinth is very often affected, and on both sides. Any portion may be attacked. The parts which suffered in all the cases were the utriculus, sacculus, ampullæ, and lamina spiralis membranacea. The parts exceptionally involved were the semicircular canals and the zona ossea. The parts most essential to good hearing were regularly affected. Whether this stands in any connection with certain peculiarities in the normal distribution of blood-vessels, I cannot at present decide. Histologically the affection is an infiltration with lymphoid cells or a small-cell infiltration. With the exception of a single case in which fat-granule cells were found beside the small-cell infiltration, with the same anatomical distribution and in almost equal abundance, the latter was the only and the constant new formation."

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[1] Archives of Ophthalmology and Otology, vol. v., No. 2.

In the six typhoid cases examined, this small lymphoid cell infiltration was found in the important parts of the labyrinth in all; in three of these cases the membranous labyrinth was discolored and yellowish, in two of them no mention is made of the color, and in the other it is distinctly stated that there was no hyperæmia or discoloration. In four of the cases there was distinct purulent inflammation, in one hæmorrhagic inflammation of the tympanum, and in the other case the tympanum was not examined, except a small portion of the mucous membrane of the promontory, which was found thickened. In both the scarlet-fever and variola cases there was purulent inflammation of the tympana; in the former the membranous labyrinth was adherent and abnormally vascular, with a small-cell infiltration of its important parts; in the latter was pus-cell infiltration, and the membranous labyrinth was thickened and yellowish. From this it is seen that distinct inflammation of the tympanum existed in seven cases, and was probable in the only case not examined, where the small-cell infiltration existed in the labyrinth; an important fact when we remember the intimate connection between the circulation of the tympanum and that of the labyrinth. To be sure, a distinct hyperæmia of the labyrinth was found in only one case, but in five of the other seven cases the labyrinth was discolored, and this discoloration was also found in the variolous case, where the labyrinth was in a state of purulent inflammation, as shown by the pus cells. Moos's examinations of typhoidal ears during life show that marked hyperæmia of the tympanum is not present even when purulent inflammation exists, and from this fact he concludes that the development of the disease of the tympanum is gradual. Might he not have applied the same reasoning to the labyrinth, and have concluded that, at least in his cases, the disease of the labyrinth was the result of a slow inflammation? Instead of that he prefers to leave the question whether we have to do with a specific new formation, peculiar to typhoid, or merely with a simple state of irritation, an inflammation, open for further investigation.

In favor of the specific typhoidal character of the disease, he says, is the fact that it occurs in both sides, and that the small-cell infiltration of the labyrinth resembles the changes which occur in the intestinal mucous membrane, in the kidneys, liver, and peritoneum during typhoid. Against this is the existence of purulent inflammation of the tympanum, the thickening and discoloration of the labyrinth, and, more than all, the fact that the same disease was found in other than typhoid cases.

The Diagnosis of Auditory Vertigo. — At the last meeting of the British Medical Association, W. R. Gowers, M. D., read a paper with the above title, in which he calls attention to some symptoms or rather complications of auditory vertigo which have never before been mentioned. The slight apparent association of the vertigo with the ear and the prominence of gastric symptoms frequently mislead both physician and patient; the paroxysms of vertigo often lead to vomiting, but occasionally only to dyspepsia, which is assigned as the primary cause of the vertigo. In addition to the acute paroxysms felt in auditory vertigo, there is also a more or less continuous sense of disturbed equilibrium, which renders the stomach peculiarly sensitive to functional disturbance. The differential diagnosis between auditory and gastric vertigo can be made generally from the paroxysmal character of the auditory variety, from the character of the sensation, and from an examination of the functions of the ear. In auditory vertigo there are distinct paroxysms, much more intense than are found in other varieties of dizziness. Gastric vertigo is indefinite; auditory definite, with a distinct sense of movement in a certain direction and often a distinct movement in that direction. In auditory vertigo examination will show an impairment of the nervous structures of the labyrinth, with tinnitus and deafness, the vibrating tuning-fork on the bones of the head being especially valuable in diagnosticating this condition.

Two cases are given. In one, auditory vertigo with labyrinthine disease in the right ear existed together with loss of taste and smell; gastric ulcer was also found, which obscured the diagnosis till the paroxysmal character of the vertigo and the fact that the patient always fell to the right side and backwards made it evident that the ear was the offending organ. In the other case there was slight dizziness with dyspeptic symptoms which were thought to be the cause, but distinct paroxysms of vertigo in which the patient fell with great violence to the right side, and the decided evidence of disease in the left labyrinth, showed, however, that the vertigo was auditory and not gastric. In this last case it is of special interest to note that a hearty meal after long fasting brought on a severe and characteristic paroxysm of the vertigo.

Treatment of Otorrhœa. — Paulsen[1] claims to have met with excellent results in the treatment of otorrhœa, uncomplicated by caries or large polypi, by means of a mixture of carbolic acid and olive oil, ten parts of the former to one hundred of the latter. He has found it much more effective than astringents or other methods which he has tried, and the combination of the acid with the oil was much better than the acid with water. His method of application is to cleanse the ear thoroughly by cotton or a probe, avoiding syringing unless it is absolutely necessary, and then, dipping a tampon of cotton in the solution, to apply it to the secreting surface and there leave it till the next day, when the same process should be repeated. In this way he has succeeded in relieving obstinate otorrhœas even when complicated by small granulations.

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[1] Monatsschrift für Ohrenheilkunde, No. 2, 1876.

Politzer[1] gives a résumé of his experience in the use of caustic solutions of nitrate of silver in the treatment of otorrhœa, as recommended by Schwartze. He had already found concentrated solutions of nitrate of silver useful in the destruction of granulations in the external meatus and on the drum-membrane, but weak solutions he found of comparatively little value in simple chronic suppuration. Stimulated, however, by Schwartze's publications of 1868 with regard to the caustic treatment of purulent aural catarrh, in which solutions of twenty grains of the salt to an ounce of water were used, he was led to try this in simple, uncomplicated otorrhœa, and now advises the use of even stronger solutions than those of Schwartze, namely, one part of the salt to ten or eight of water. Great stress is laid, however, on the method of application, and it is probable in practice that failures often result from the want of attention to these minutiæ and from the lack of personal attention on the part of the physician. Above all it is important that all secretion be removed from the middle ear by inflation, either with the Politzer-bag or by the catheter, and that then the meatus be thoroughly syringed out; this being done, the meatus must be carefully dried by pledgets of lint or cotton, in order that the solution may come in contact with the diseased mucous membrane. Any secretion left in the ear will unite with the silver to form an albuminate of silver.

For cauterizing the middle ear ten to fifteen drops of the solution should be poured into the ear with the head inclined to the opposite side; if the drum-membrane is largely destroyed, the solution readily finds its way into the tympanum; if, however, there is but a small perforation, it is necessary to inflate the tympanum or else to force the solution into the cavity by pressing the tragus down against the meatus. The only unpleasant results met with in these applications were smarting in the pharynx when the solution ran down the Eustachian tube, and a dizziness produced by the pressure on the labyrinth: the former passes off in a few hours, and the latter is relieved by inflation of the tympanum.

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[1] Archiv für Ohrenheilkunde, ii. 1.

It is necessary that the solution should remain in the ear long enough to produce a decided slough of the membrane, and for this purpose one to two minutes is sufficient. A less time than that merely produces a grayish sediment from the union of the silver with the epithelium and mucus, and this comes away in a few hours at the longest, while an effectual slough does not come away for twenty-four hours or even longer. The superfluous solution, after producing the slough, should be syringed out. Neutralization by means of a solution of salt, as advised by Schwartze, is not considered necessary by Politzer. The action of these concentrated silver solutions in checking the discharge is less dependent on the duration of the disease than on the condition of the mucous membrane and the general health, and it is also more certain where there are no granulations, although Politzer has seen such granulations disappear very rapidly under this treatment.

Schwartze's claims that a nearly certain cure followed the use of the caustic applications where the otorrhœa was uncomplicated are not confirmed by Politzer, but in cases where it was used and failed to check the discharge he has afterwards frequently obtained a good result from the insufflation of pulverized alum in minute quantities, and he considers the combined use of the concentrated silver solution and the powdered alum as the most effectual method of treating chronic suppuration of the middle ear. He recommends that, if after eight or ten applications of the caustic, the secretion does not diminish, the alum be used.

The same care should be used in applying the powder as the silver; the ear should be thoroughly cleansed and dried and the powder blown in in small quantities against the secreting surface, the physician satisfying himself by inspection that the surface is covered white. If the secretion is not profuse, the powder will remain in the ear at least two days, and if on the third day the powder still remains dry and in position, it is recommended not to syringe the ear, but to allow the powder to chip off of itself. If, however, the powder has become moist, the ear must be thoroughly syringed to free it from the masses of alum and secretion which occasionally adhere so firmly as to require also some careful manipulation with the probe for their removal. As experience teaches that, frequently, by the day after the syringing the secretion has ceased entirely, it is advisable not to make the next application till satisfied by waiting that the discharge still continues.

(To be concluded.)

PROCEEDINGS OF THE OBSTETRICAL SOCIETY OF BOSTON.

C. W. SWAN, M. D., SECRETARY.

MARCH 11, 1876. The president, DR. HODGDON, in the chair.

Erysipelas and the Puerperal Condition. — DR. BOARDMAN reported the following case: Mrs. M. was recently pregnant six or seven months with her fourth child, the exact duration being unknown, as the catamenia had not been present since the birth of her previous child. In consequence of receiving two severe blows in rapid succession upon the left side of her abdomen, the membranes apparently were ruptured, and a large amount of fluid escaped from the vagina. Two weeks later labor was completed suddenly, and a living child was forced from her while she was standing. Two days later the child died. During the day on which she was confined one of her children complained of feeling unwell, and of pain in the side of his face. On the following day he presented a well-marked facial erysipelas upon this side, which subsequently involved the entire face and scalp, and was attended with very high fever. Convalescence became fully established on the eighth day, the disease running a normal course. During his week's illness he was confined to his bed, alongside that of his mother. It is a rare occurrence for a puerperal woman and a patient with erysipelas to *remain* in such immediate juxtaposition, and the result was watched with no little anxiety as well as interest, especially when we consider that the several accidents in the interval must have had a prejudicial effect upon the system of the woman in childbed, and may, perhaps, have rendered her condition more favorable for the reception of the erysipelatous poison to which she was exposed so greatly. Fortunately, however, she recovered rapidly from her confinement, without any unusual or unfavorable symptom. Dr. Boardman remarked that it is held by some writers that idiopathic erysipelas possesses no element of danger in connection with the puerperal condition.

DR. SINCLAIR said that he had raised a similar question in reference to a case which had come under his own observation. Two weeks before, he had seen a lady with puerperal peritonitis in a house in which scarlet fever had occurred. Her disease began two days after a normal labor, and she died eight days later, or ten days after confinement. Scarlet fever broke out in the oldest child one week before the confinement. Query: Had the scarlet fever anything to do with the puerperal disease? The woman was enormously swollen, with a good deal of tenderness, but no localization of the disease in any particular part of the abdomen. There was no diarrhœa.

Sudden Death, probably from Embolism. — DR. REYNOLDS reported the case of Mrs. S., primipara, well nourished and twenty-five years of age. One week before delivery the urine deposited, on being boiled, one eighth of its bulk of coagulated albumen. There were no casts, and the patient had no symptoms threatening eclampsia. The bowels were sufficiently open. She was ordered twenty drops of tincture of iron thrice daily, and a daily dose of sulphur and bitartrate of potash. The first stage of labor continued through the night of February 19th and all day on the 20th. At four A. M. on the

21st the os was well dilated, and the membranes gave way. At nine A. M., the pains being unsatisfactory, and the head being unable fairly to descend into the excavation, the forceps were put on, and after a very easy extraction a living girl was born. The placenta followed immediately. No hæmorrhage occurred. The patient was very restless and fidgety during labor, but otherwise did well enough.

Mrs. S. proved unable to nurse. For many days the lochia were offensive, and the vagina was daily washed out with warm water. There was unusual lameness of the back and hips, and difficulty in moving herself. The pulse and temperature presented nothing remarkable. Dejections occurred spontaneously. The appetite was very poor, and there was much thirst. On the tenth day and the days succeeding the patient complained of slight pains and tenderness in the left calf and over the left femoral vessels. The left leg was kept flexed and on a pillow. There was never any œdema. Quinine and iron were, from the fourth or fifth day, freely administered, and the leg was enveloped in batting covered with oiled silk. On the thirteenth day a ten-grain Dover's powder procured an admirable night. The patient was unusually well and cheerful on the following day, and ate her dinner at noon with great relish. At 3.40 P. M. she was attacked with cardiac distress; she grew unconscious in three minutes, and died at 3.50 P. M. An autopsy was not allowed, though earnestly sought.

Supposed Case of Puerperal Thrombus. — DR. MINOT reported the case, which he saw in consultation with Dr. Bickford, of Charlestown. A young woman, primipara, pale, and not strong, was confined without accident and remained in bed for two weeks afterwards. On the second day after she had begun to sit up she was seized with severe pain in the chest and urgent dyspnœa, and had a rapid pulse. On the next day there was a little improvement, but the action of the heart was exceedingly rapid and very feeble, and the pulse was weak. An examination of the legs revealed no tenderness or swelling. The patient did well, and recovered perfectly. In answer to questions Dr. Minot stated that he advised digitalis, which was given, ten drops of the tincture, to be increased to fifteen, three times a day. The patient began to improve very soon after taking it. Stimulants were also given.

Large Uterine Fibroid attached to the Posterior Lip and complicating Labor. — DR. HOMANS, remarking that he had reported the case of this patient at previous meetings of the society, said that she had been confined a fourth time three weeks ago. At the first confinement there was great difficulty in extracting the child. The tumor was then of the size of a big fist. The second child, small, was born about fourteen months after the first, at the eighth month. When the patient was seen the waters had broken and the head was presenting. Delivery was accomplished by forceps. The third labor was at the seventh month, and the child was born before the arrival of the doctor. The fourth labor was at six and a half months. The first tumor was still present, and opposite to it was a second of equal size. The fœtus was drawn away, but the placenta was left behind till the next day, when it was expelled by the uterus, fifteen drops of the fluid extract of ergot having been given every three or four hours in the interval. The two tumors remain, and there is, apparently, a third tumor in the body of the uterus. Examinations at other times than at the labors have not been permitted.

Dr. Lyman said that it is stated that these tumors develop with the development of the pregnant uterus, and that after labor they disappear by undergoing with the uterus a process of involution. When they do not undergo this process he did not see why these tumors should not be removed. He mentioned the case of a patient who at the time of delivery had quite an uncomfortable tumor which, within a year after labor, had entirely disappeared.

Dr. Chadwick said that there was no doubt that such tumors disappear during the puerperal period. He had heard Scanzoni refer to the case of a tumor which at labor was as large as a cocoa-nut. Four months afterwards there were no traces of it. He had seen at South Weymouth a pregnant woman with a fibroid tumor as large as an orange, situated in the anterior wall of the uterus. Three months after delivery the tumor could not be found, and had been probably absorbed. Dr. Chadwick remarked upon the curious fact that fibrous tumors are apparently no obstacles to conception, which takes place as frequently with as without the presence of the tumor.

The Horizontal Position as Effecting Retroversion of the Uterus. — **Dr. Lyman** reported the following case. A young lady, who was a school-teacher and single, said to him that although she might walk about all day without trouble she dreaded going to bed, as the moment she lay down she had great pain in the back; she could find no comfortable position, and her sleep was in consequence much disturbed. She had had no pelvic difficulty, although the catamenia had been a little more free the past year or two. She was examined, first, in the standing position, and the uterus was found to be normally erect; when the patient lay down there was very slight retroversion. A small Hodge's pessary was introduced, and for the first time for months she was able to sleep with comfort. The patient has since reported the greatest possible relief from the application.

A Group of Related Cases, some of them Diphtheritic. — **Dr. Wellington** reported these cases. Mrs. A., aged about thirty, was delivered of her second child on Wednesday, February 16, 1876. The labor was natural, and the child did well until Saturday, February 26th, when, the cord having separated, the umbilicus became red, and this was followed by ulceration and a purulent discharge. The inflammation extended for a space of two inches or more around the navel, with swelling and infiltration, and an erythematous blush spread still farther over the anterior surface of the body. At ten o'clock on the morning of the fourth day, the child, who in the mean time had apparently been getting on pretty well, seemed tolerably bright and appeared to warrant a hopeful prognosis. An hour after, it died.

On Sunday, February 27th, the day after the appearance of the erysipelas in the baby, the mother began to have swelling of the external genitals, with much excoriation, and painful micturition. The swelling was very great and the suffering intense. Dr. Wellington had never before seen so severe an inflammation of these parts occurring after confinement. No membranous exudation was noticed. Two or three weeks elapsed before recovery.

Before delivery there had been a good deal of itching of the external organs.

On Tuesday, February 29th, the day of the death of the baby, the older child, a little girl three years of age, was taken with vomiting, became very feverish, and had a sore throat. The next day there was an eruption, which lasted only a few hours. The throat became very bad, the tonsils were greatly swollen, and the whole throat was covered with a diphtheritic membrane. This afterwards peeled off, leaving a raw surface, from which blood exuded freely. There was considerable epistaxis. The membrane extended to the larynx and trachea, and the child died with symptoms of membranous croup on Sunday, March 5th.

On Saturday, March 4th, the father, who had become worn out from taking care of the children, and for two or three days had suffered from sleeplessness and various nervous symptoms, had fever and sore throat, with diphtheritic effusion, and became seriously sick. He recovered in about a fortnight.

These four cases, which occurred in a family of four persons at nearly the same time, two of the cases proving fatal, formed a singular and sad complication.

One additional fact is worth stating. The child who died of diphtheria was carried to South Abington for burial. The coffin was opened on the day of its arrival, and the body was seen by several of the relatives. One of these, a gentleman twenty-two years of age, two days after was taken with diphtheria. He was seriously ill, but eventually recovered. There had been no previous case of diphtheria in that town. The disease was prevalent in some of the adjoining towns, but this gentleman had not been exposed to it.

Dr. Sinclair recalled the case of an older child who had erysipelas beginning at the vulva. Death occurred with great suddenness.

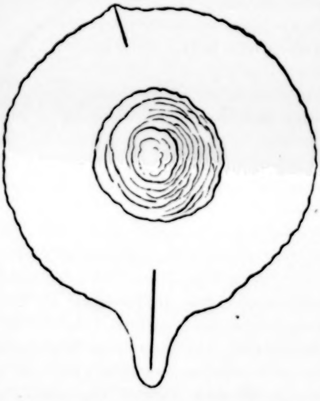
Dr. Minot added the case of a child thirteen weeks old, in whom the disease began on the nates and spread all over the body. The patient was much prostrated, but recovered completely. In another case the inflammation, which resulted from vaccination, migrated over the whole body. This child also recovered.

Dr. Hodgdon reported the case of a child in whom erysipelas began on the shoulders and traveled to almost every part of the body, healing at one part and extending in another. This patient recovered. In another case, in which the disease began two days after birth, the whole surface of the body was invaded, and death resulted at the end of two weeks. There was great fever, but no formation of pus.

Dr. Stedman said that infantile erysipelas was generally fatal. He had been taught to recognize as a distinct affection the so-called erythema fugax, resembling and often confounded with erysipelas, but without the fatal tendency of the latter. Dr. Stedman had attended many labors while he had other patients with erysipelas, scarlatina, suppurating wounds, etc., and till lately had made frequent autopsies, without evil results to lying-in women. Great care and cleanliness were matters of course to an obstetrician, but if erysipelas and scarlatina, as well as puerperal diseases, required the abandonment of one's midwifery cases, he did not see how a practice was to be carried on. A medical friend, Dr. A., desired him to take charge of Mrs. B., as Dr. A. was attending Mrs. C. with puerperal erysipelas. Dr. Stedman was called upon and delivered Mrs. B., and a few days after discovered that the nurse on duty came straight from the house and bedside of Mrs. C. Mrs. B. made a rapid and complete recovery, leaving Dr. A. to balance the account between his conscience and his pocket.

Pigmentary Deposit in Mammary Cicatrix. — DR. RICHARDSON, in reporting the case, alluded to the fact that, owing to the crowding together of the mammary ducts at the nipple, it is always deemed advisable to make the incision, in cases of mammary abscess, as far from the centre of the breast as possible, in order that the ducts may receive no unnecessary injury. The following case seemed to show another reason for the exercise of care in selecting the spot for the incision, and to indicate the necessity for avoiding the making of any cut across the border-line of the areola, lest, besides a needless wounding of the mammary ducts, an unsightly and irregular discoloration of the breast be produced.

K. S., twenty-five years of age, was confined with her second child in the Boston Lying-in Hospital, February 17, 1876. According to the patient's story she had been confined with her first child in New York, March 24, 1874. Some time after her delivery in that city she "took cold," and had a large mammary abscess in the right breast. A small incision was made at the upper part of the areola, but the opening not being deemed sufficient, a second cut was made two days later, at the lower edge of the areola. The first incision lay almost entirely within the areola, while the second, starting from a point about half an inch within, ran to a corresponding distance without the line of the circumference. An examination of the breast showed a very curious deposit of pigment, as affected by the location of the incision. At the upper part, where the cut scarcely passed beyond the line, a slight waving only in the regularity of the line was produced; but below, a deposit of pigment had taken place, which entirely surrounded the cicatrix of the lower incision, thus forming a prolongation of the areola at that point, measuring over half an inch in length and nearly that distance in breadth. The result was a very marked disfigurement of the breast, which it would seem advisable to avoid in operations of this kind. In case an abscess pointed along the line of the areola, a subcutaneous opening, made from a point below, which, while it gave a free exit to the pus, would avoid wounding the line of pigmentary deposit, would promise better results.



Dyspareunia. — DR. FORSTER, referring to the discussion on the subject at the previous meeting, mentioned a case in which the distress was occasioned by a spot of herpetic eruption as big as the little finger nail, situated at one side of the fossa navicularis. This was cured in a few days, and all trouble ceased.

Dr. Hodgdon related the case of a young woman, married one year, whom he delivered by forceps after a tedious labor. She made an ordinarily good recovery. A few days before, and on one other occasion only, she had excessive pain in the region of both ovaries, lasting several hours, following sexual intercourse. She never experienced pleasure in the sexual act, and never knew what sexual desire was, before or since her marriage. Nothing abnormal was observed at the time of labor.

Dr. Minot said that he had seen two or three such cases, as in the instance of a lady who had borne two children. In her case there was an entire absence of desire or pleasure, but she did not have the ovarian pain as in the case just reported. Dr. Minot called attention to the remarkable fact that such women conceive as readily as any others.

Dr. Chadwick related a case in which there was for years a total absence of sexual feeling, until the birth of twins, ten years ago. Since then there has been the most frightful nymphomania. The patient has severe neuralgia, erotic dreams at night, spasms, and headaches, which are much relieved by intercourse, which occurs about once in two weeks. Bromide of potash was given with some effect in reducing the dreams and headaches, and phosphorus was administered with very much the same effect, but in neither case was the relief perfect or permanent.

Dr. Read suggested the use of lupulin. Several years ago he employed this remedy in a case of masturbation in an old lady, with very satisfactory effect. There was no disposition to keep up the habit, but on the contrary a good deal of solicitude manifested as to what change could have taken place in her feelings. The dose was ten grains administered in beer, of which the patient was very fond.

Dr. Chadwick mentioned the case of a married woman who experienced the natural sexual feelings until about six months before, when sexual intercourse became entirely distasteful to her, but at the same time she became subject to erotic dreams, from which she would wake up and find herself masturbating. She was not lacking in affection for her husband, and has continued to have intercourse as often as usual.

Dr. Sinclair said that he had a patient, a lady aged twenty-four, who, as in the case just mentioned, had no pleasure whatever in the sexual act, but who masturbates regularly. Of late she has gone eight or ten days without indulging in the habit.

THE MEDICAL MEN OF THE REVOLUTION.

If, as we hope, our readers have not forgotten our centennial number of June 17, 1875, they may remember that we had announced for it a paper with the above title by Dr. J. M. Toner, of Washington, which the indisposition of the author prevented his completing. What was our loss has been the gain of the Jefferson Medical College, for Dr. Toner continued his work and made it public in an address before the alumni delivered on March 11, 1876. He gives an interesting account of the struggles of the medical department of the continental army and a short biographical sketch of many of the surgeons. A list of nearly twelve hundred names of medical men who took more or less part in the contest, appended to the address, shows the thoroughness of Dr. Toner's research. We had no idea that half that number of men, with any claim to be called medical, could be found at that time in the country, but Dr. Toner estimates that there were three thousand five hundred. The profession has reason to be proud of the part played by our predecessors. Their services began with the first skirmish. Dr. Samuel Prescott gave the alarm that on the 19th of April, 1775, the British troops were to march on Concord. The names of nine physicians who took part in the fight in military or medical capacity have been preserved. Among them was Dr. Joseph Warren, the president of the Provincial Congress of Massachusetts, who fell, two months later, at Bunker Hill. It was about the time of the latter engagement that hospitals were first established. As may be imagined, great confusion existed, and the want of system was much felt. Jealousy between hospital and regimental surgeons appears to have run high. On the 27th of July Dr. Church was made director of the hospital near Boston, but his career was brief and melancholy, for three months later a court-martial found him guilty of holding criminal correspondence with the enemy. As he was simply expelled, there is reason to hope that he cannot have intended absolute treachery. Dr. Morgan, who succeeded Dr. Church, did good service, but apparently had a stormy administration, owing to the dissensions that were constantly occurring. In April, 1776, he removed the hospital to New York; early in 1777 he was removed himself, apparently without cause. We cannot follow Dr. Toner through his interesting sketch for want of room, but everywhere we see the same enthusiasm and skill, followed too frequently by jealousy and intrigue. The medical department no doubt served as a scapegoat for numberless offenses, or rather deficiencies, which the nature of the country and the army rendered inevitable. As we look back at those times, it is with wonder that so much was done and so well done, not with disappointment that a raw country did not have well-appointed ambulances. As to the diseases, typhoid, dysentery, and diarrhœa appear to have been the chief scourges, though there was much small-pox, which was kept alive by inoculation. As to the acquirements and standing of the mass of the surgeons but little is known, though we are sure that many occupied the highest rank in the community. Dr. Toner finds that over one hundred had obtained academical degrees at home or abroad. Of these, twenty-four came from Harvard, first then as now, twenty-one from Princeton, and three from Yale.

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MEDICAL NOTES.

— The Boston Medical Library has just received from Dr. J. N. Borland the gift of his medical library, numbering over two hundred volumes of the most valuable recent text-books and standard works. It is to be hoped that the very satisfactory condition of the library as shown in the first annual report, which we published last week, will induce other members of the profession to deposit in this library, either as a gift or as a loan, such books, journals, or pamphlets as they no longer have occasion to use at home. It is desirable that physicians in the city and suburbs who feel inclined to contribute toward the support of this institution should enroll themselves as members of the association.

— Cinchona cultivation is reported to be very successful in India. In Sikkim there are now nearly three millions of trees in growth, mostly of the red variety, yielding a large quantity of the alkaloid. In the Neilgherry hills there are some three thousand acres under cultivation. In British Birmah the cultivation of the bark is also carried on with success.

— A new medical tax is announced from the Bureau of Medical Affairs in Berlin, of which the following are points: for a distance of two kilometres, or less, carriage fare and time cannot be charged (a kilo. is about three fifths of an English mile); for a distance of more than two kilos, carriage fare may be reckoned; night visits are those made between ten P. M. and seven A. M.; the amount of a single fee may depend upon the station in life, also upon the ability of the patient to pay and the severity of the case. The charge for the first visit at a patient's house is from two to six marks (a mark represents twenty-five cents of American specie); for every succeeding visit, one to three marks; for a night visit, six to eighteen marks; for an office visit, one to three, and for an office visit at night, three to nine marks.

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BOSTON CITY HOSPITAL.

MEDICAL CASES OF DR. F. W. DRAPER.

REPORTED BY C. W. BROWN, M. D.

Ulceration of Large Intestine complicated with Renal Disease. — Julia S., aged thirty-seven years, born in Ireland, entered the hospital June 28, 1876. During the previous six months she had been somewhat debilitated, but was always able to perform her duties. Ten days before her entrance she had two chills, and one on each of the three following days; there was also vomiting, with anorexia, diarrhœa, and sharp pain in the region of the left nipple, increased by full inspiration; there was slight cough without expectoration. The diarrhœa persisted until two days before the patient's entrance to the hospital.

At entrance the pain was not severe. The patient complained chiefly of weakness and poor appetite. The tongue was moist and covered with whitish coat. The pulse was weak, 80 per minute; the temperature was 98.1°.

July 1st. Twenty drops of the tincture of the chloride of iron were prescribed, to be given three times a day. The patient did not complain of pain; slept much without opiates, and was very listless. Appetite poor.

July 7th. Condition nearly the same as at last report. No recurrence of diarrhœa. Discharged at own request.

July 22d. Reëntered. Since her discharge the patient has vomited more or less steadily and has had a severe persistent diarrhœa; no tenesmus. The dejections do not contain blood. There is some vertigo, with slight pain in the back and epigastrium. Patient is very weak; appetite poor; much thirst. Tongue moist and clean. Skin moist. Temperature 98.4°. Pulse small, feeble, 96.

July 23d. Diarrhœa continues; dejections yellowish and watery; no blood. Patient has vomited twice since entrance. Diet of milk and lime-water, and ten grains of subnitrate of bismuth every two hours.

July 24th. Vomiting checked. Diarrhœa continues; dejections involuntary, and of the same character as before. Patient inclined to stupor. No pain. Pulse very weak. Omit bismuth; sherry wine was ordered, four ounces per day as wine whey, also beef-tea two ounces every two hours.

℞ Pulv. opii	gr. i.
Cupri sulphatis	gr. ¼. M.

Every three hours in pill.

July 25th. Dejections more numerous and continue involuntary. The patient sank rapidly and died.

Autopsy, by Dr. W. P. Bolles, four hours after death. There were old adhesions in both pleuræ. The heart was rather soft, its valves perfect. The liver was small, — weight, two and one half pounds, — considerably indurated by increase of its interstitial tissue, and somewhat granular. The left kidney was contracted, gray, and very much degenerated; its capsule thoroughly adherent to the organ as well as to the surrounding fat. At one end was a large cicatricial spot. The right kidney, also adherent to fat, was reduced to one half an ounce in weight; it was flat and shapeless, showing but very little renal substance upon section.

The mucous membrane of the small intestine was very thin, the valvulæ conniventes being few and small and apparently atrophied; that of the large intestine was swollen and soft, covered in places with exudation and riddled with ulcers of various sizes, mostly small and not extending into the muscular coat. Peyer's patches were not diseased. The head was not examined.

This case is interesting as showing the lesions of dysentery without any dysenteric symptoms. The dejections did not at any time contain blood or mucus, nor was there tenesmus. The persistent diarrhœa eliminated the water and urea which the degenerated kidneys could not excrete, and thus the intestinal lesions seemed to partially compensate for those of the kidney.

A patient recently died in the hospital, under the care of Dr. O. W. Doe, who presented similar symptoms during life and the same appearances upon post-mortem examination.

An article appeared in the *American Medical Times*,[1] by Dr. H. W. Cooke, upon the Diarrhœa of Soldiers, with an account of seventeen autopsies. The clinical history and record of post-mortem examinations bear a striking resemblance to the cases above mentioned. The chief symptoms were weakness and diarrhœa. The intestinal lesions were always in the large intestine, and most marked in the rectum. The kidneys were degenerated, in most cases showing the appearances of Bright's disease. The urine did not contain albumen, but showed renal casts in abundance.

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[1] Vol. vi., page 102.

Gangrene of the Lung treated with Salicylic Acid. — O. M., forty-five years old, a well-developed laboring man, entered the hospital July 1, 1876. His health had always been good (with the exception of slight attacks of asthma) until the beginning of the previous month, when without known cause he was attacked with severe cough attended by copious expectoration of "blood and corruption" which had a very foul odor. He continued his daily work until one week before coming to the hospital, when he was attacked with a chill, followed by sudden increase of cough. The expectoration became more profuse. For a few days the sputa were nearly "half blood." He had sharp pains at the base of the chest on the left side; decubitus on the right side greatly increased the cough and expectoration. At the time of entering the hospital, the patient's sputa amounted to about two pints in twenty-four hours. He was quite weak, his appetite very poor, and his bowels constipated. Respiration 30, temperature 100.6°, pulse 90.

July 2d. Physical examination showed dullness on percussion over the left back, amounting to flatness at base. There was corresponding dullness in front. On auscultation, there were found sonorous and sibilant râles in the right back, most abundant at the base. In the left back, about the angle of the scapula, respiration was bronchial over a space of the size of the hand, with coarse and fine mucous râles and a peculiar gurgling as of air drawn through a dilated tube filled with thick fluid. At the left base in front, were subcrepitant râles. The sputa were abundant, dark in color, and purulent, having a well-marked gangrenous odor. Salicylic acid was prescribed, ten grains three times a day. Pulse 108, temperature 102.2°.

July 9th. Cough troublesome at night. A drachm of the syrup of poppies was ordered at night and one grain of sulphate of quinia three times a day. The expectoration has become less abundant and the sputa are less offensive. The temperature has fallen steadily until it has now reached the normal point. Salicylic acid was omitted, and the offensiveness of the sputa fully reappeared within forty-eight hours.

July 11th the patient had ten grains of salicylic acid every two hours; this soon rendered the sputa nearly inodorous. The patient did well until the 16th, with the exception of an attack of hæmoptysis, which was controlled by ergot. On the 16th hæmoptysis recurred with increased severity, and gallic acid, five grains every hour, was given. Examination showed dullness on percussion throughout the left back, above the angle of the scapula, flatness below. Resonance was normal in the left front. Respiration was obscure in the left back. There was sharp pain in the left side of the chest.

July 18th, the hæmoptysis having ceased, gallic acid was omitted. The sputa were abundant, purulent, and entirely free from gangrenous odor. The patient received two pints of ale per day. Hæmoptysis recurred on July 23d, and was again controlled by gallic acid.

July 27th. Cavernous respiration is heard at and outside the angle of the left scapula. There is a distinct sinking in of chest-wall throughout the left scapular region. The general condition is much improved; appetite good.

August 3d. Salicylic acid was omitted, the sputa being entirely without gangrenous odor.

August 9th. Fewer râles in the affected region; cavernous respiration with pectoriloquy, just below the angle of the left scapula; cough and expectoration diminishing; sputa becoming mucous in character.

August 17th. The left lower lobe is still dull on percussion, but cavernous respiration has given place to bronchial, with a few fine mucous râles in the same region. The sputa are mucous. Nutrition excellent.

August 22d. Bronchial respiration has nearly disappeared. A few subcrepitant râles remain. The chest-wall in left scapular region is more depressed. The appetite is excellent. The general condition continues satisfactory. Discharged.

This case is of special interest because of the apparent action of salicylic acid. At the time of the patient's entrance, so far as physical examination enabled one to judge, the left lung was considerably affected with gangrene. Under the use of salicylic acid the disease, instead of advancing, was confined to parts already attacked. When but thirty grains of the acid were given daily, the sputa became less offensive and the quantity was much diminished. That this was not accidental was shown by the fact that the odor fully returned and the quantity increased when the acid was temporarily omitted. When the acid was given in larger doses than ten grains three times daily, the sputa lost their gangrenous odor and appearance. These changes were particularly manifest and agreeable to the patient himself.

LETTER FROM LONDON.

Messrs. Editors, — Scarcely arrived in London, it may be imagined with what pleasure I availed myself of Mr. Spencer Wells's kind invitation to be present with Dr. Greenhalgh of St. Bartholomew's, Dr. Paky of Pesth, Dr. Osterloh of Dresden (whom I had repeatedly met at places of gynæcological interest in Edinburgh), Dr. Willard of Washington Territory, and five other gentlemen, at his seven hundred and ninety-fifth operation for ovariotomy. The opportunity was one to which I had been looking forward for many years. It had been my good fortune to see somewhat of Mr. Wells during his visit to America. I had tried to keep the run, so to speak, of his several series of published cases, and had frequently been favored with verbal reports of his methods of procedure from professional friends who had seen him operate at the Samaritan, so that when I came myself to be present, it was with the feeling that while I should undoubtedly find much to admire there could be little of novelty, and little with which, at least by description, I was not already familiar. In this, however, I must acknowledge that I was greatly mistaken. I cannot do better than give briefly a description of to-day's operation, and then state consecutively the points of interest that most forcibly struck me, in the belief that they may furnish valuable hints to some of our operators at home.

(1.) Those invited to attend were requested to sign a certificate that they had not been present within seven days at a post-mortem examination, visited a dissecting-room, or treated a case of contagious disease.

(2.) They were then, punctually at the moment appointed, taken to an upper chamber, with bright, open exposure to the southwest, where Mr. Wells stood in readiness for his patient, who was already anæsthetized.

(3.) Bichloride of methylene was the agent administered, or rather air charged with methylene by means of a caoutchouc pump.

(4.) The lower extremities were confined by a band across them; the upper ones by a strap to each wrist, the arm being brought down beneath the table and fastened to one of its supports.

(5.) The abdomen was covered by a thin rubber sheet, with a circular opening adapted to the possible length of the incision. Beneath the table, to catch the fluid contents of the cyst, or anything which might drip, was an ordinary metallic hip-bath tub. Under the edge of the table, fastened so as to be within immediate reach of the operator, hung Mr. Wells's large spring-trocar, with a long curved arm, to which was attached a rubber tube of great calibre, communicating with the tub beneath.

(6.) None of the bystanders were permitted to examine or otherwise touch the patient.

(7.) The incision was short, low down, occupying but a portion of the umbilico-pubic interval, and was completed upon a director of peculiar form, broad towards its rounded extremity. There were extensive adhesions, which were broken down by the hand with tolerable ease; moderate hæmorrhage occurred from their site, and from vessels in the line of incision; the cyst was multilocular, one of its cells containing a large amount of turbid fluid. Through the trocar-opening, sufficiently enlarged, Mr. Wells passed his hand and broke down such of the adjoining septa as would thus yield. The mass having then been readily delivered, a stout, slightly curved steel clamp was attached to the pedicle, and on severing this the first stage of the operation was completed in ten minutes from the first stroke of the knife.

(8.) The other ovary, though still small, proving cystic, was also removed, the base being transfixed by a double silk thread tied on each side.

(9.) All coagula having been carefully removed from the peritoneal surface and pelvic cavity, the clamp was adjusted crosswise externally and the wound was closed by seven stitches, the pedicle emerging between the last and the last but one. These sutures, like the ligature already described, were of Chinese silk, uncarbolized. They were passed through both the integument and the peritoneum, without, however, taking up the whole thickness of the abdominal wall, and during their tying the loose pouch of the abdomen was bunched up, as it were, by the hand of an assistant. The threads were provided with a needle at each extremity, the second of which was held by the operator's lips while the first was being passed, thus preventing twisting and other entanglement and permitting greater speed.

(10.) The wound having been closed, bits of lymph were carefully placed under the clamp and between the sutures; the extremity of the pedicle outside the clamp was touched with solid perchloride of iron; the abdomen was covered with cotton-wool, over which were strapped broad bands of adhesive plaster; a binder of flannel was placed outside this, and the entire operation was completed in just half an hour from its commencement.

Nothing could have exceeded the adroitness and celerity, yet absolute thoroughness and perfect neatness of the whole procedure. There were two female nurses and two assistant surgeons, besides the gentleman in charge of the anæsthetic. They were all constantly occupied, and each, knowing exactly what to do, at what moment, and how, never came for a moment into the others' way, so that there were six busy pairs of hands, every one at its especial work. The operation, from beginning to end, was as if done by the most perfect yet sentient mechanism, and was an apt illustration of the consummate skill that only such unequaled practical experience as that of Mr. Wells could produce.

To the casual observer it might have seemed, so quietly, rapidly, and steadily was everything done, that Mr. Wells's dexterity, as I have indeed heard declared, was but the result of the constant repetition of a seemingly simple procedure, and that his extraordinary proportion of recoveries, unapproached save by Dr. Thomas Keith, of Edinburgh, was an instance of sheer good fortune alone. Those of real experience in such matters think far otherwise. One glance at this operator fairly in action, utterly carried away as he is by his work, his eyes sparkling and fixed, yet taking in as it were the whole patient, is sufficient to convince one that he is ready for every possible emergency, and that the great impression is not so much of what one actually sees as of the invisible power held in reserve and available at a second's notice for the time of need.

As to Mr. Wells's percentage of recoveries, in no wise, I believe, depending upon chance, there is even more to be said. I may hereafter, in another communication, refer to the general subject, having, as is tolerably well known at home, decided views of my own as to the essential points in ovariotomy, so that I will just now confine myself to what was shown at the operation of today. There are many questions of interest, as, for instance, whether ovariotomy succeeds better with American or English patients, for the races differ greatly as regards nervous excitability, tolerance of shock, etc., but then it must be remembered that Mr. Wells's successive series now represent patients from almost every part of the globe; and as to whether operators are more fortunate in city or in country air. The great bulk of Mr. Wells's sections are made in the very heart of crowded London. What, then, are his secrets? To discover some of them we have but to glance again at what I have just written.

(1.) He permits no inoculation with septicæmia by the visitors who are present, no matter if they be intimate friends. They cannot touch the patient's person, much less her mucous membrane by a vaginal examination; and by their written certificate they are put upon their honor that they have not within a week been even within a suspicious atmosphere.

(2.) Similarly, precautions are taken against the chance induction of simple peritonitis. By permitting no examination, whether external or internal, by visitors, a deal of unnecessary stirring up of the patient's pelvic and abdominal viscera is avoided. At such times it is but a sorry compliment to a professional friend to ask him to verify the diagnosis, while abstinence from such manipulation may to the patient make the difference between life and death.

(3.) The patient, having been anæsthetized previous to their entrance, sees no stranger. Visitors would instinctively retire at the close of an operation, but they are too often ushered into the room prematurely, thus causing much unnecessary nervous excitement, which most certainly cannot increase the chance of recovery.

(4.) Celerity in this operation, provided time enough be allowed for the completion of every requisite stage, and the closure of all points of hæmorrhage, means not *éclat* for the operator so much as safety for the patient, by preventing undue exposure of her viscera and peritoneum to atmospheric irritation and chill. To insure this, skilled assistants are required, who are not only generally, but specially, versed in every possible detail of the operation.

(5.) Every minute precaution, if wise, counts towards the result; so that to confine the patient's extremities beforehand leaves the assistants free for other duties and preserves the operator from stoppage in his work; saves his mind from annoyance and his thoughts from being turned from the point of the moment. In the same way perfect neatness and cleanliness, everything being in its place, and that place a matter not of chance but of prevision, helps the result. Napkins soaked with ascitic and ovarian fluid, sticky sponges, puddles of coagula, and instruments coated with half-dried blood may seem the necessary adjuncts of such an operation, but their absence goes far to keep the operator's hands facile, his mind cheerful, his speed great, and to cause his whole work to be better done.

(6.) Other things being equal, the shorter the incision the better, for manifold reasons. To disintegrate the morbid mass from within its substance by the hand passed into the cavity of a cyst is far more judicious than to pull and to twist and otherwise forcibly undertake to deliver it, whether by hand, by forceps, or by both combined. The adjacent viscera are less disturbed in position and less liable to be bruised, the peritoneum receives infinitely greater protection, and there is less traction upon the pelvic ligaments.

To the other steps of the operation I need not refer, covering as they do ground that is now much more common to surgeons. I used myself to attach great importance to passing the sutures through the peritoneum, as Mr. Wells did in the case now reported, but I have had recoveries when, to decide this question, no suture whatever was used; either the external lips of the wound were simply brought together by adhesive straps, or its internal edges by deep outside pressure of a similar character. And so with regard to the treatment of the pedicle. In this instance it was brought outside, and a styptic antiseptant applied. Recoveries have so constantly followed not merely this method, especially known as Mr. Wells's, but deep tying, whether with silk, catgut, or wire, deep acupressure, the actual cautery, and even other procedures, the comparative merits of which have not been decided, and of which one seems best on one occasion and another on another, that I do not now discuss them. My aim has been to point out certain general principles, hardly as yet appreciated, which must underlie all constant success; and I am quite sure that in Boston, where the performance of this operation of ovariotomy, perhaps *the* great triumph of modern surgery, was, not many years ago, in Mr. Wells's own presence, pronounced "a mere matter of taste," my remarks will be appreciated and their justness coincided in.

49 South Street, Park Lane, W., London, *October* 4, 1876.

COMPARATIVE MORTALITY-RATES FOR THE WEEK ENDING NOVEMBER 4, 1876.

	Estimated Population, July 1, 1876.	Total Mortality for the Week.	Annual Death-Rate per 1000 for the Week.	Death-Rate for the Year 1875.
New York	1,061,244			29.35
Philadelphia	825,594	310	19.52	22.24
Brooklyn .	506,233	179	18.41	24.92
Chicago . .	420,000	164	20.30	19.75
Boston . .	352,758	131	19.31	26.20
Providence	101,500	46	23.56	19.02
Worcester .	51,087	22	22.39	20.91
Lowell . .	51,639	33	33.23	20.55
Cambridge	49,670	7	7.33	23.31
Fall River	50,372	15	15.48	23.99
Lawrence .	36,240	10	14.35	25.96
Lynn . .	33,548	14	21.70	19.23
Springfield	32,000	9	14.62	20.93
Salem . .	26,344	13	25.61	22.92

Normal Death-Rate, 17 per 1000.

Messrs. Editors, — In your notice of the graduating exercises at Dartmouth have you not given too free a construction of the Hippocratic oath as regards the duty of medical instruction without fee? Is it not limited to the sons of our preceptor in medicine? "Præceptorem artis medicæ loco parentum habebo. Pro fratribus erunt mihi posteri ejus; eamque artem illos, ubi voluerint, edocebo, absque mercede vel præsenti, vel ad tempus ad scripta."

W.

Boston Society for Medical Observation. — A regular meeting of the society will be held on Monday evening next, at its rooms, 36 Temple Place, at eight o'clock. Dr. Fifield will read a paper on Acute Cystitis.

Books and Pamphlets Received. — Principles of Human Physiology. By William B. Carpenter, M. D., F. R. S. A new American from the Eighth revised and enlarged English Edition. Philadelphia: Henry C. Lea. 1876.

Epitome of Skin Diseases, with Formulæ. By Tilbury Fox, M. D. Philadelphia: Henry C. Lea. 1876. (Both of the above for sale by A. Williams & Co.)

Diseases of the Nose and its Accessory Cavities. By W. Spencer Watson, F. R. C. S. Philadelphia: Henry C. Lea. 1876.

Transactions of the Medical Society of Pennsylvania. Vol. xi. Part 1. Philadelphia. 1876.

Twenty-Fifth Annual Report of the Boston Provident Association. Boston. 1876.

Deirdrè. Boston: Roberts Brothers. 1876.

Recherches expérimentales sur le Rôle physiologique et thérapeutique de la Pancréatine. Par Th. Defresne. Paris: A. Delahaye.

The Theory and Practice of Medicine. By John Syer Bristowe, M. D. Lond., F. R. C. P. Edited, with Notes, by James H. Hutchinson, M. D. Philadelphia: Henry C. Lea. 1876. (For sale by A. Williams & Co.)

Transactions of the New Hampshire Medical Society. Eighty-sixth Anniversary, held at Concord, June 20 and 21, 1876.

A Lecture on Specialism in Medicine. By E. D. Forée, M. D., Professor of Diseases peculiar to Women in the Medical Department, Central University, Louisville, Ky. (Reprinted from The American Practitioner, November, 1876.)